User Manual

- **FEATURES:**

1. Code Hopping and Code Learning.
2. Remote Starting.
3. Remote (silent) arming/disarming.
4. Starter disable (500mA negative output when armed)
5. Auto re-arm.
6. Driving lock mode.
7. Car (silent) searching.
8. Audible intrusion zone identification.
9. Defective zone alert and by-pass.
10. Power failure memory.
11. Key-less entry.
12. Remote panic.
13. Anti-hijack.
14. Emergency reset.
15. Last Door Arming set by transmitter.
16. When triggered by sensor, the siren will sound for 30 sec. and reset automatically.
17. When triggered by door, trunk, hood or ACC the siren will sound for 60 seconds.
18. Built-in actuator's relay.
19. Central locking, active time selectable– 0.5 or 3.5 seconds.
20. Two negatives and one positive trigger input.
21. Plug-in dual zone shock sensor.
22. Pre-warn away.
23. Multi-function LED status indicator.
24. Inline fuse protection.
25. Remote trunk release (for optional trunk opener system).
26. Windows close (for optional window closer system).
27. Remote engine warm-up time (6 or 18 minutes.)
28. Programmable Gear Sensor.
29. Valet mode.
30. Turbo timer – 2 minutes.

- **ARMING:**

When exiting the vehicle, press and release button Ⅰ (not over 2 seconds) siren will chirp once to confirm arming. Lights flash once, doors lock, power windows roll-up (if installed) and engine kill is enabled.

- **DISARMING:**

In armed mode, press and release button Ⅱ, siren will chirp twice, lights flash twice, doors will unlock and engine kill disables.

- **SILENT ARMING:**

Press the button Ⅲ, the system will have no audible confirmation but lights will flash once.

- **AUTO RE-ARMING:**

After disarming the alarm system, if the car owner does not enter the vehicle and turn on the ignition switch within 30 seconds, then after 20 seconds the alarm will re-arm.

- **DEFECTIVE ZONE ALERT & BY-PASS:**

While arming the alarm, if the siren chirps 4 times (3 times for silent arming), this means that there is a door not shut properly. The alarm will bypass that zone, however, it will still protect other zones.

- **ALARM MODE & WARN AWAY:**

Pressing button Ⅰ、Ⅱ or Ⅲ will stop alarm trigger mode, and system will remain in armed mode.

1. If the alarm is triggered by the first stage of the shock sensor, the siren will sound for 2 seconds.
2. If the car is tampered with or bumped into, the alarm will sound for 30 seconds and then re-arm.
   (In silent arm mode, the siren will not sound for being triggered by sensor)

3. If door、trunk、hood is opened or ACC (ignition switch) is turned on, the system will sound for 60 seconds.

- **INTRUSION IDENTIFICATION:**

If the vehicle is tampered with or intruded, when disarming the alarm, the siren will chirp different sounds to identify which zone has been tempered.

1.	Second stage of sensor was triggered	3 chirps & 3 lights flash
2.	Door、hood was opened, or ACC was turned on	4 chirps & 4 lights flash

- **CAR (SILENT) SEARCHING:**

Press button Ⅰ in arming mode, lights will flash once and siren will sound a long blare to execute car-searching function.
Silent car searching: press button Ⅲ and it will only flash the lights to spot the vehicle.

- **REMOTE ANTI- HIJACK by TRANSMITTER:**

While you were driving the car, press button Ⅰ for over 2 seconds, the system will activate ANTI-HIJACK. The lamps will flash twice, and after 30 seconds the siren will sound and lights will flash. After 15 seconds, the engine kill will activate and the engine will shut down. After15 seconds, the windows will roll up and the doors will be locked (if all features are installed).
To release this function; just press button Ⅰ again, the system will confirm and the LED will turn off.

- **REMOTE PANIC:**

When ignition switch is off, press button Ⅰ for over 2 seconds, the siren will sound and lights will flash. After 60 seconds, alarm will return to previous status. However, pressing button Ⅰ again will turn off the panic mode rather than waiting for 60 seconds.

- **DRIVING LOCK MODE:**

1. Turn on ignition (all doors must be closed properly) and 2 second later the Central Door Locking will be locked automatically.
2. Turn off ignition the Central Door Locking will be unlocked automatically.
3. Set / Release this function: Turn the ignition switch on, press button Ⅱ for 2 seconds-

1.	One chirp	Driving lock mode is set **(Factory default)**
2.	Two chirps	Driving lock mode is released

- **EMERGENCY KEY RESET:**

1. If the remote is lost, or its battery become exhausted, the owner can enter the car by using a code.
2. It can be set by the ignition switch:
   A.) Open a door and pull the handbrake. (keep door open)
   B.) Turn the ignition on/off 5 times (Each turn on/off must be finished within 1 second) and this will disarm the alarm instantly.

- **REMOTE TRUNK RELEASE:**

When ignition switch is off, press and hold button Ⅱ over 2 seconds, the system will open the trunk. In arming mode, however, the system will enter disarming mode first before opening the trunk.
Note: Disarming the alarm system in this way will not execute “Auto Re-arm” feature.

- **LAST DOOR ARMING:**

1. Whenever the ignition is turned from on to off and all doors are closed, after 20 seconds the siren will echo 2 chirps (lamps flash twice) to remind the driver and 10 seconds later, the system will lock the doors and enter armed mode automatically.
2. Set / Release "last door arming": Turn the ignition switch on, press button Ⅰ & Ⅱ at the same time for 2 seconds-

1.	One chirp	Last door arming is set **(Factory default)**
2.	Two chirps	Last door arming is released

- **KEYLESS ENTRY WHILE IGNITION IS ON:**

When driving the car, you can lock the door by pressing button Ⅰ of transmitter. To unlock the doors press button Ⅱ of transmitter.

- **TURN ON/OFF the VALET MODE:**

1. Turn on the ignition switch; then press the button Ⅲ for over 2 seconds to activate the valet mode.
2. The siren will chirp once and LED status light will be on.
3. In this mode, the system can only operate panic、doors lock and 2nd channel output.
4. Turn on the ignition switch; then press the button Ⅲ over 2 seconds, the valet feature will be turned off. In the meantime the LED will be turned off and siren will echo two chirps.

- **SOFTWARE GEAR SENSOR ON/OFF:**

For manual transmission, programming is required.

1. How to program the software gear sensor:
   Turn on the ignition switch, press button Ⅱ+Ⅲ at the same time over 2 seconds.

1.	One chirp	Software gear sensor is on (for manual transmission car). **(Factory Default)**
2.	Two chirps	Software gear sensor is off (for auto transmission car).

2. How to operate the software gear sensor:
   When you are seated in the vehicle with the engine running and doors are closed, place the shifter in the neutral position and pull up the handbrake. Press the button ◦ to activate running mode. In the meantime, the lights will turn on. Turn off the ignition switch and remove the key from the ignition within 15 seconds; the engine will stop immediately after the doors are closed. Siren will chirp once.
   Note: if Turbo timer is on, the engine will stop after 2 minutes instead of right away.
   Note: above purpose is assuring the manual transmission car will be in the neutral position when leaving the vehicle.
3. In the attempt to start the engine by the transmitter without these steps, the siren will echo 6 chirps (5 chirps for silent arming) and vehicle will not start.

- **TURBO TIMER ON/OFF:**

When you are seated behind the wheel, place the shifter in the neutral position and pull up the handbrake. Press the button ◦ to activate keyless running mode. In the meantime, the lights will turn on. Turn off the ignition switch and remove the key from the ignition; the engine will stop after 2 minutes.
Turn on the ignition switch, press button ◦ for over 2 seconds.

1.	One chirp	Turbo timer is on
2.	Two chirps	Turbo timer is off **(Factory default)**

- **REMOTE ENGINE START WARM-UP TIME:**

This system has two options for start warm-up time - 6 or 18 minutes, which is programmed by remote.

Turn on the ignition switch, press button Ⅰ+Ⅲ at the same time for over 2 seconds.

1.	One chirp	Remote engine start warm-up for 18 minutes
2.	Two chirps	Remote engine start warm-up for 6 minutes **(Factory default)**

- **POWER FAILURE MEMORY:**

Any attempt to interrupt the power and connect it again, the alarm will keep the original status.

- **REMOTE ENGINE STARTING:**

Press button ◦ for engine start. The siren chirps once (If previous status is silent arming mode, the siren no chirp). There are two modes for engine starting.

※Diesel engine mode:

Lights flash 7 times, the engine will start with 7-second pre-heating.

※Gasoline engine **mode:**

Lights flash 3 times and engine starts automatically.

1. If the car doesn't start successfully, or engine stops, the system will start again up to 5 times.

2. After the engine is started, the lights will flash. After 20 seconds, the air regulator will be activated.

3. Press button ◦ again to stop the engine and system will return to previous status.

4. Start the engine in arming mode:

※Press button Ⅱ to unlock the doors, the system will enter disarm mode directly.

※Any attempt to open the door or hood will trigger the alarm, the system will kill the engine, flash the lights and sound for 60 seconds, then return to arming mode.

5. After the engine has been started for 6/18 minutes, the system will kill the engine and return to previous status and the siren will sound for 3 seconds.

Note: If the car is in abnormal conditions (i.e. Hand-break is not pulled up), the system will echo two long sounds, and return to previous status.

- **LED STATUS INDICATOR**

Slow flash : Arm / alarm / panic / anti-hijack.
Fast flash : Auto re-arm.
Steady light : Last door arming / send message to controller.
No light : Disarming mode.

Note: Main unit will not accept the command during sending message to controller.

<< BRIEF OPERATION TABLE >>

Button	Ignition off	Ignition on	Engine start in arm mode
Press button Ⅰ	Arm/ Car search	Lock	Lock
Press button Ⅱ	Disarm	Unlock	Disarm/ Unlock
Press button Ⅲ	Silent arm/ Silent Car search		
Press button ◦ for 1 second	Remote start On/Off		Kill engine
Press button Ⅰ over 2 sec.	Remote panic	Anti-hijack	
Press button Ⅱ over 2 sec.	Trunk release		Disarm & trunk release
Emergency reset	a.) Open a door and pull down the handbrake (keep door opening) b.) ACC On-Off 5 times		

<<PROGRAMMABLE FEATURES>>

Function	Ignition on	System echo	Factory Default
Last door arming	Press button Ⅰ+Ⅱ over 2 sec.	ON : 1 chirp	●
		OFF: 2 chirps	
Driving lock mode	Press button Ⅱ over 2 sec.	ON : 1 chirp	●
		OFF: 2 chirps	
Valet mode	Press button Ⅲ over 2 sec.	ON : 1 chirp	
		OFF: 2 chirps	●
Warm-up time setting	Press button Ⅰ+Ⅲ over 2 sec.	18 min : 1chirp	
		6 min: 2 chirps	●
Turbo timer	Press button ◦ over 2 sec.	ON: 1 chirp	
		OFF: 2 chirps	●
Software gear sensor	Press button Ⅱ+Ⅲ over 2 sec.	ON: 1 chirp	●
		OFF: 2 chirps	

★★★ ILLUSTRATION OF 2-WAY CONTROLLER ★★★

- **LEARNING TRANSMITTER CODES:**

Step 1: In disarmed mode, turn the ignition switch ON/OFF five times (**each time must be finished within 1 second, or alarm system will skip it)** and keep the ignition switch to "ON" position, siren will echo 4 chirps.

Step 2: Within 10 seconds, press button [I] & [◦] of new transmitter for learning. When the first transmitter code is learned, all other previous codes will be erased, which is protecting your alarm system from all other codes entering without your knowledge.

ITEM	*TRANSMITTER*	*SYSTEM CONFIRMATION*
1.	The 1st transmitter	One siren burst and one siren chirp.
2.	The 2nd transmitter	One siren burst and two siren chirps.

Step 3: Turn off the ignition switch or 10 seconds of no transmitter activity, alarm system will skip automatically the code-learning program and siren will chirp once.

- **THE OTHER FUNCTIONS OF 2-WAY CONTROLLER:**

1. **Power saving function**: press button [II] + [◦] at the same time.

1.	Short beep	Power saving function is ON
2.	Long sound	Power saving function is OFF **(Factory default)**

When disarming the system and the power saving function is on, 70 seconds later, the 2-way controller will shut off the power automatically.

NOTE: The 2-way controller cannot monitor the system's status in the last door arming mode when the power saving function is on.

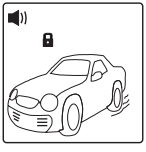
2. **Silent function (Vibration function):** press button [III] + [◦] at the same time.
The LCD screen will appear ((O)), and all confirmation sound will turn off except the sound for alarm.
3. **Turn on backlight of LCD:** press button [I] & [◦] at the same time.
The backlight will turn on for 3 seconds if no other button is pressed.
4. **Timer indicator:** There are three types of timer as follows:
(1) Timer of arming: When the system enters arming mode or silent arming mode, the timer will initialize. The maximum interval for timer is 19 hours and 59 minutes.
(2) Timer of engine warm-up: When the engine starts successfully by remote, the timer will initialize.
(3) Turbo timer: Please refer to page 4.
5. **Low voltage indicator:**
When battery becomes exhausted, the icon of on the LCD screen will disappear. For some battery, it will only have the low sound confirmation. Please change the battery for the controller at this moment.
6. **How to change battery:**
First of all, unlock the cover and slide it off, it will beep once and all icons will turn on for a while after putting on the new battery. If there is no beep after changing the battery, please take out the battery and reinstall it after 30 seconds. If you want to retain the data of timer, put on the battery within 30 seconds.

※After changing of battery, make sure the cover is properly closed and lock it.

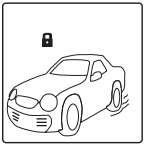
※ALKALINE battery is recommended.

*** THE ICONS OF HT491 (2-WAY CONTROLLER) ***

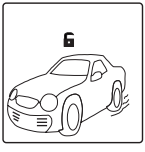
1. Arming



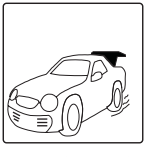
2.Silent Arming



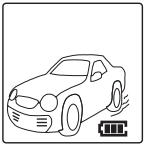
3.Disarming



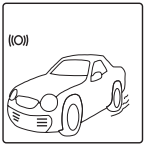
4.Trunk Release



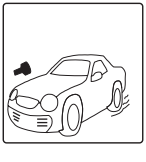
5. Battery



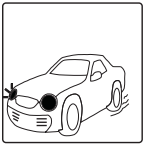
6. Vibration Mode



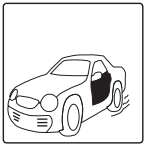
7. Trigger(sensor)



8. Trigger(Acc)

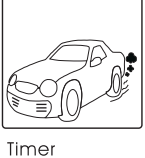


9. Trigger(door)

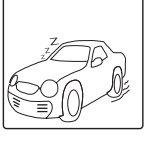


10. Engine start

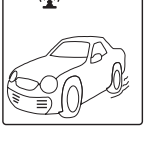
11. Engine warm-up



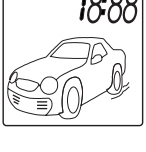
12. Valet mode



13. 2-way communication



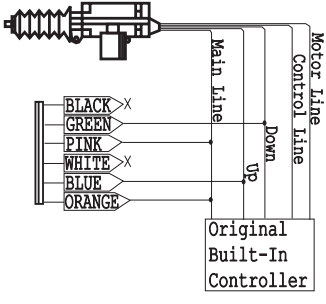
14. Timer



Central Lock Wiring Diagram

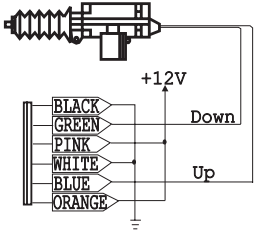
*** Diagram #1 ***

Original Built-In Central Power Lock



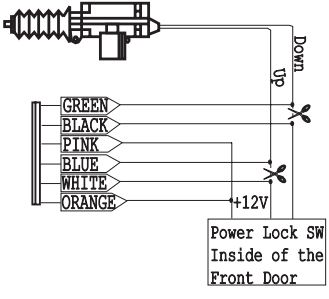
*** Diagram #2 ***

Built-In Power Lock & only a SW Existed Inside of the Front Door, A Motor and the Control Level were Required.



*** Diagram #3 ***

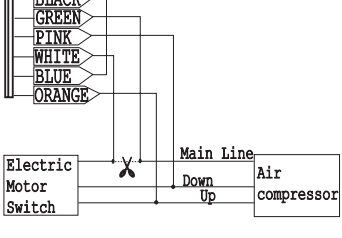
Built-In Power Lock & Electric Power Lock SW were Installed. For example: CHRYSLER



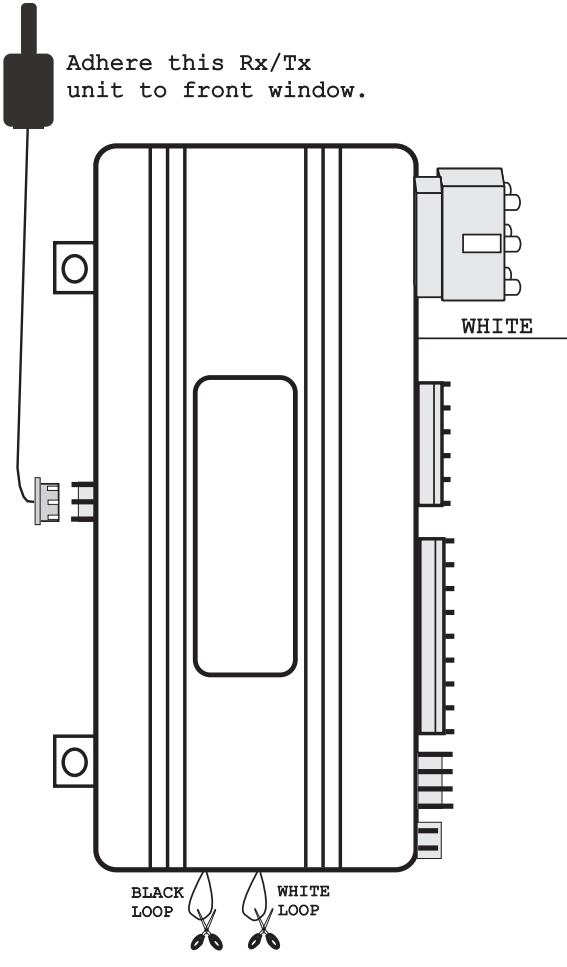
*** Diagram #4 ***

Built-In Power Lock & Using Compressor to Control the SW. For example:BENZ, AUDI

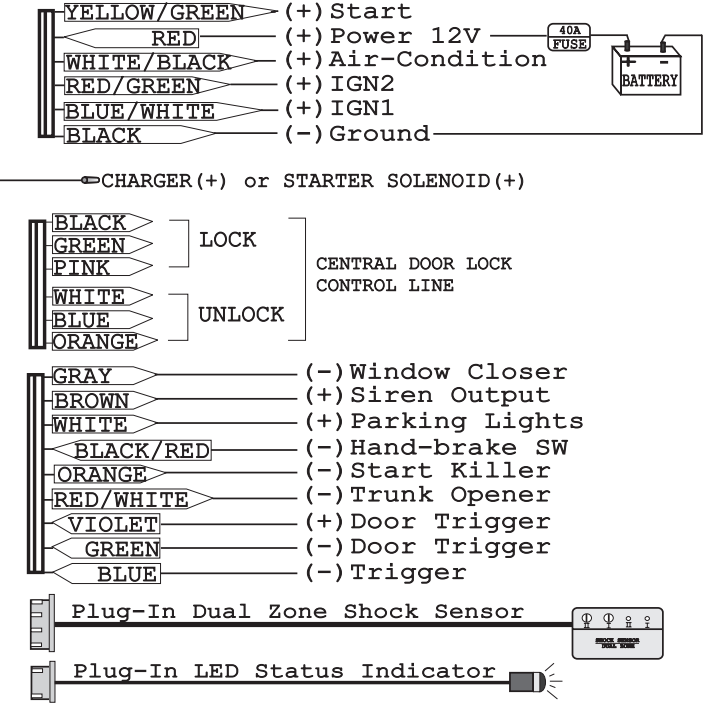
(Note: Active time 3.5 secs.)



KG-888 WIRING



DIAGRAM


YELLOW/GREEN
(+) Start
RED
(+) Power 12V
40A FUSE
BATTERY
WHITE/BLACK
(+) Air-Condition
RED/GREEN
(+) IGN2
BLUE/WHITE
(+) IGN1
BLACK
(-) Ground
CHARGER(+) or STARTER SOLENOID(+)
BLACK
GREEN
PINK
LOCK
WHITE
BLUE
ORANGE
UNLOCK
CENTRAL DOOR LOCK CONTROL LINE
GRAY
(-) Window Closer
BROWN
(+) Siren Output
WHITE
(+) Parking Lights
BLACK/RED
(-) Hand-brake SW
ORANGE
(-) Start Killer
RED/WHITE
(-) Trunk Opener
VIOLET
(+) Door Trigger
GREEN
(-) Door Trigger
BLUE
(-) Trigger
Plug-In Dual Zone Shock Sensor
Plug-In LED Status Indicator

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9-pin White Plug

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KG888 INSTALLATION HANDBOOK

INTRODUCTION

This installation handbook is designed for the professional installer. This book assumes the installer has a comprehensive understanding of how automotive electrical systems operate and the proper way to test and connect wiring for proper operation.

INSTALLATION GUARDLINE

Determine most suitable location for all components to be placed. These components include main unit, switches, and relays.

Use a multi-meter to test and locate all of your connection points. Record the color codes and polarity of the wiring. This will save time by not having to retest the same wires for same car again.

Allow enough wire to create a service loop with strain relief, should servicing the required. This will also allow for easier access and mounting.

INSTALLATION WARNINGS

- **DO NOT EXTEND STARTER WIRE HARNESS LENGTH** when mounting module, make certain to place module so that wire reaches ignition switch wiring. Extending this wire may result in starting problems.

- **DO NOT ROUTE ANY WIRING THAT MAY BECOME ENTANGLED** with brake, and gas pedals, steering column, or any other moving parts in the vehicle.

- **DO NOT EXCEED THE RATED OUTPUT CURRENT** of any circuit. Failure to this warning will result in damage to the unit and possible resulting damage to the vehicle.

- **WHEN STARTING THE VEHICLE IN A GARAGE**, make sure that door is open and adequate ventilation is provided.

- **DO NOT CONNECT TO VEHICLE'S MAIN POWER FEEDS INTO THE IGNITION SWITCH**. Always run your own fused heavy gauge power leads direct to the battery or battery distribution post.

INSTALLATION

RED wire-12gauge **5th pin of 6-pin white plug** **12 volts Positive Input**

Connect RED wire to positive terminal of vehicle battery, do not connect main power at fuse box or ignition switch. Make certain fuses are removed from holders to prevent any possible shorts while routing wire.

BLACK wire-14gauge **1st pin of 6-pin white plug** **Ground Input**

Using the correct size crimp-on ring terminal, connect the black wire to the metal frame of the vehicle, preferably using an existing machine-threaded fastener. Make sure that the black wire's ring terminal has contact with bright, clean metal. If necessary scrapes any paint, rust or grease away from the connection points until the metal is bright and clean. Ground point should measure less than 1Ω difference when compare to negative battery post.

YELLOW/GREEN wire-14gauge **6th pin of 6-pin white plug** **Starter Output**

This module has a built-in 40 amps relay output to engage the starter.

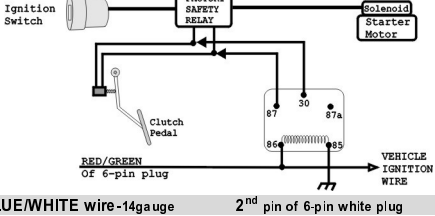
- Locate vehicle starter wire. It will have 12V in the "crank" position only. Cutting this wire will prevent the starter from cranking.
  A.) Starter solenoid wire at back of ignition switch.
  B.) Neutral safety switch.
  C.) At clutch pedal safety switch (some manual transmission).
  NOTE: **DO NOT BYPASS AUTOMATIC TRANSMISSION NEUTRAL SAFETY SWITCH CONNECT STARTER OUTPUT WIRE BETWEEN IGNITION SWITCH AND TRANSMISSION NEUTRAL /PARK SAFETY SWITCH.**
  Make certain all factory safety systems operate normally after installation.
- Connect the 14gauge YELLOW/GREEN start output wire to vehicle's starter wire.

CLUTCH PEDAL BYPASS
FOR MANUAL TRANSMISSION

If starter wire for the vehicle is run through clutch pedal safety switch, you can connect the YELLOW/GREEN start output wire directly to the starter solenoid side of the clutch pedal switch.

OR

Connect the YELLOW/GREEN start output wire to the vehicle's starter wire at the ignition switch AND use a relay, activated by the RED/GREEN ignition 2 trigger wire, to make the clutch pedal safety switch wires connect together when remote starting.



BLUE/WHITE wire-14gauge **2nd pin of 6-pin white plug** **Ignition 1**

BLUE/WHITE wire is for secondary ignition operation. Vehicle's secondary ignition wires operate heater/air conditioning circuits, alternator charging, and theft deterrents (GM). This wire will supply 12V to ignition harness for the ACC positions only. This circuit DROPS OUT DURING CRANKING (starter on).

NOTE: In some vehicles, additional secondary ignition may be required to operate separate AC/Heater circuitry and Anti-theft systems.

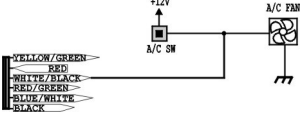
RED/GREEN wire-14gauge **3rd pin of 6-pin white plug** **Ignition 2**

This wire is for main ignition operation. Vehicle's main ignition wires operates the coil, fuel pump, fuel injectors, engine computer module, etc. This wire will supply 12V to ignition harness wires that operate in both the ON and START (crank) positions.

NOTE: In some vehicles, additional main ignition may be required to operate engine cooling fans, transmission computers, and ECU's.

WHITE/BLACK wire-14gauge **4th pin of 6-pin white plug** **Air Condition**

This WHITE/BLACK wire is for air condition operation. Connect this wire to the switch of A/C fan. The following diagram shows the connection.



IGNITION WIRING

There are many ignition switch configurations. We show the most common wiring situations you will encounter.

See vehicle ignition wiring chart on following section. Locate your vehicle. Use this information, along with the diagram to follow, to connect to your ignition wiring.

Locate the ignition switch wiring harness. In many American cars the switch is in the steering column and the harness comes out of the top of the steering column. In many Japanese and European vehicles the harness is accessible of the back of the switch.

Diagram 1: most Japanese vehicles, most GM vehicles, Chrysler/Dodge/Plymouth (Including trucks and imports)

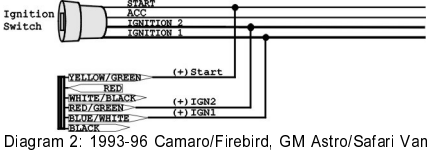


Diagram 2: 1993-96 Camaro/Firebird, GM Astro/Safari Vans, 1994-96 GM Trucks (S/T & C/K)

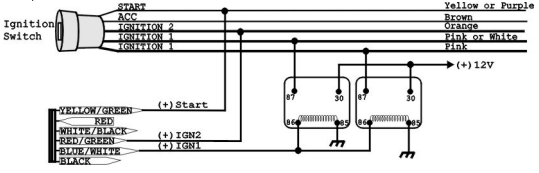


Diagram 3: GM 1988-1994 Grand Prix, Cutlass Supreme, Buick Regal, and Chevrolet Lumina

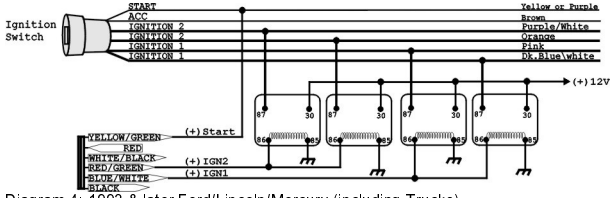


Diagram 4: 1993 & later Ford/Lincoln/Mercury (including Trucks)

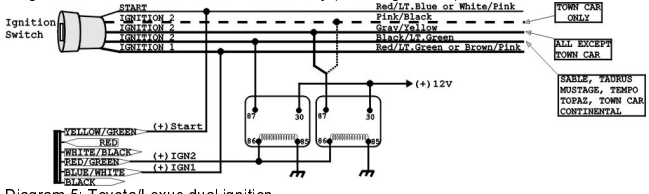


Diagram 5: Toyota/Lexus dual ignition

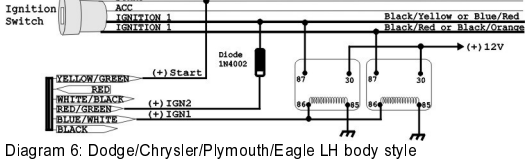
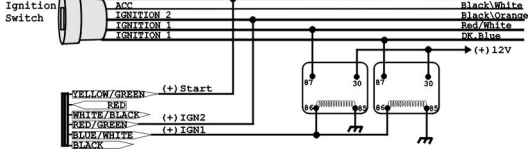


Diagram 6: Dodge/Chrysler/Plymouth/Eagle LH body style (Intrepid\LHS\New York\Concorde\Vision)



IGNITION WIRING: SPECIAL INSTRUCTIONS
GENERAL MOTORS PASS KEY & PASSLOCK SYSTEM
GM PASS-KEY SYSTEM

Some GM vehicles, Corvette, Cadillac, and other high line makes, have a factory anti-theft system that disables the starter and fuel injectors. This system uses a resistor embedded in the ignition key to release the anti-theft system

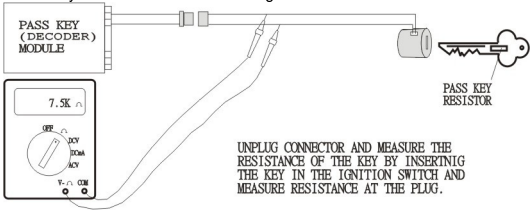
TO OVERCOME THE PASSKEY SYSTEM WHEN REMOTE STARTING, a resistor of identical value must be installed to deactivate the anti-theft system. Use relay diagram below.

Locate the two pass key wires in the steering column. These wires may have insulating jacket around them. These wires may also be located at the pass key module.

Below is listed the possible different wire colors:

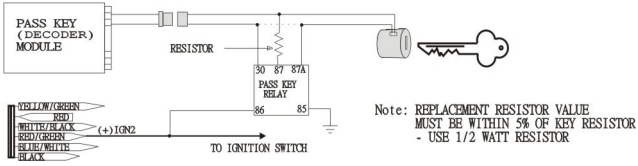
A pair of Black or White 22 gauge wires
Purple/white and White/black wires
Yellow and Brown wires (older models)

Now insert the ignition key into the ignition switch and measure the resistance across the two wires. Use a good quality multi-meter to get an accurate measurement. It may be necessary to disconnect the wires to get an accurate measurement.



IGNITION WIRING: SPECIAL INSTRUCTIONS
GENERAL MOTORS PASS KEY SYSTEM

The diagram below shows how to bypass the PASSKEY for remote start and still maintain the VATS integrity under normal use. If you wish bypass the PASSKEY completely, simple cut both wires of the passkey and place resistor across both wires going to the decoder module.



GM PASSKEY RESISTOR VALUE

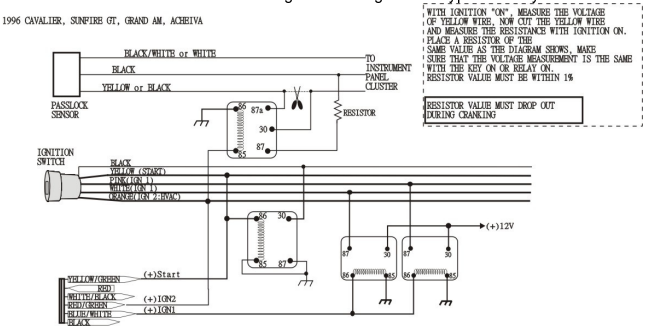
392 ς	1130 ς	3010 ς	7500 ς
523 ς	1470 ς	3740 ς	9530 ς
681 ς	1870 ς	4750 ς	11.8 Kς
887 ς	2370 ς	6040 ς	

NOTE: Always checks resistor value with a meter to verify its value before installing into the vehicle. Extreme temperature (very hot or very cold) may also affect resistor value. It may be necessary to use a 1-% tolerance resistor in some cases.

NOTE: **Replacement resistor value must be within 5% of key resistor- use a 1/2-watt resistor.**

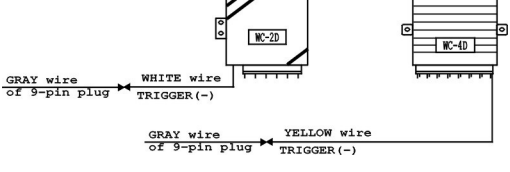
IGNITION WIRING: SPECIAL INSTRUCTIONS
GENERAL MOTORS PASSLOCK SYSTEM

This system is currently found in General Motors 1996 Chevrolet Cavalier, Pontiac Sunfire and Pontiac Grand Am. Below is the diagram showing how to bypass this system.


1996 CAVALIER, SUNFIRE GT, GRAND AM, ACHEIVA
WITH IGNITION "ON", MEASURE THE VOLTAGE OF YELLOW WIRE. NOW CUT THE YELLOW WIRE AND MEASURE THE RESISTANCE WITH IGNITION ON. PLACE A RESISTOR OF THE SAME VALUE AS THE DIAGRAM SHOWS. MAKE SURE THAT THE VOLTAGE MEASUREMENT IS THE SAME WITH THE KEY ON OR RELAY ON. RESISTOR VALUE MUST BE WITHIN 1%
RESISTOR VALUE MUST DROP OUT DURING CRANKING
BLACK/WHITE or WHITE
BLACK
YELLOW or BLACK
TO INSTRUMENT PANEL CLUSTER
PASSLOCK SENSOR
RESISTOR
IGNITION SWITCH
BLACK
YELLOW (START)
PINK(IGN 1)
WHITE(IGN 1)
ORANGE(IGN 2 /HVAC)
(+)12V
YELLOW/GREEN
RED
(+)Start
WHITE/BLACK
(+)IGN2
RED/GREEN
(+)IGN1
BLUE/WHITE
BLACK

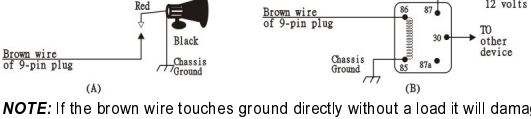
GRAY wire -20gauge **9th pin of 9-pin white plug** **Negative Window Closer**

Connect GRAY wire to power window closer trigger line. There are two types of window closer: WC-2D is for 2 windows; WC-4D is for 4 windows. The connection to window closer module illustrates on the following diagram.



BROWN wire-18gauge **8th pin of 9-pin white plug** **Positive Siren Output**

The Brown wire is connected directly to the siren's RED wire, and the siren's BLACK wire is connected to chassis ground (diagram A). If other devices are to be supplied by the BROWN wire, additional relay will be required as follows (diagram B):



NOTE: If the brown wire touches ground directly without a load it will damage the alarm module.

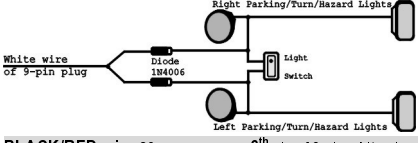
WHITE wire -18gauge **7th pin of 9-pin white plug** **Flashing Parking Light**

Connect this wire to the vehicle's positive 12 volts parking/turn signal/hazard lights.

American and Japanese vehicles, the parking lights operate on a single fused circuit. Connect the WHITE wire directly to the back of any parking light or at main lighting switch with an in-line 10 amp fuse.

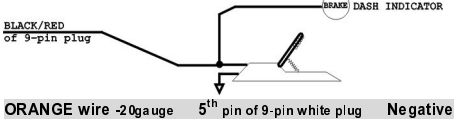
NOTE: Some Japanese vehicles use a ground-triggered relay to active parking lights. This ground trigger wire can be easily located in the steering column harness.

European vehicles and all hazard/turning signals, the light circuits are separately fused for left and right. A pair of 6 to 10 amp diodes must be used to connect the white wire to each parking light side. The following diagram shows the method:



BLACK/RED wire-20gauge **6th pin of 9-pin white plug** **Hand-brake SW**

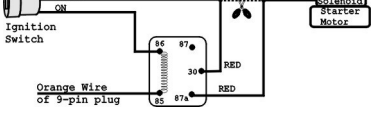
Connect BLACK/WHITE wire to end of hand-brake switch, this point will have 12 volts when you pull down the hand-brake, and 0 volt when you pull up the hand-brake.



ORANGE wire -20gauge **5th pin of 9-pin white plug** **Negative Output for Starter Killer**

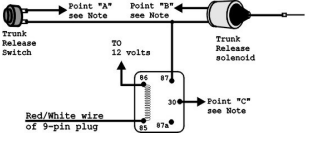
To interrupt the vehicle's starter circuit, the starter wire must be located and cut. We recommend that this should be done as close to the ignition switch as possible. Use a voltmeter, **DO NOT USE A TEST LIGHT**, to find the correct wire, which is the wire from the ignition switch to the starter solenoid.

CAUTION: Improper use of a test light can cause deployment of the airbag, which may result in bodily injury! Test lights can also damage expensive on-board computers and associated sensors. The starter wire will read 12 volts only when ignition key is in "start" position (cranking the engine). Cut this wire at a suitable location. Confirm that this is the correct wire by turning the ignition switch to the "start" position. The starter should not engage.



RED/WHITE wire -20gauge 4th pin of 9-pin white plug Optional Trunk Release Output

Unless the vehicle's trunk release switch negatively triggers a solenoid that draws no more than 250mA, an external relay must be used. The following diagram shows the typical connection:



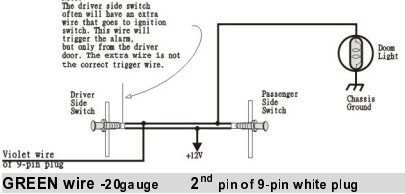
NOTE: There are two possible situations for the polarity of point "C":

1.If point "A" is +12 volts, point "B" must be constant ground, then +12 volts is required.

2.If point "A" is constant ground, point "B" must be +12 volts, then negative is required.

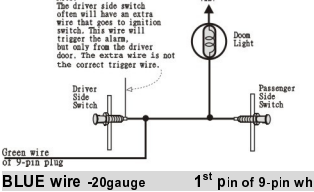
VIOLET wire -20gauge 3rd pin of 9-pin white plug Positive Door Trigger Input

Connect the VIOLET wire to a wire in the vehicle which is common to all the door pin switches. This type of door switch system will have 12 volts when any of the doors are opened, and chassis ground when the all of the doors are closed. The following diagram shows a basic positive door switch system:



GREEN wire -20gauge 2nd pin of 9-pin white plug Negative Door Trigger Input

Connect the GREEN wire to a wire in the vehicle that is common to all the door pin switches. This type of door switch system will be ground when any of the doors are opened, and up to 12 volts when all of the doors are closed. The following diagram shows a basic negative door switch system:

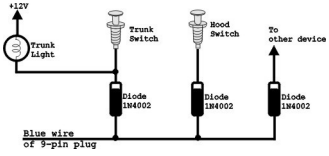


Note:If the switch is mounted in the plastic, a constant ground wire will also be presented.

BLUE wire -20gauge 1st pin of 9-pin white plug Instant Trigger Input

The included pin switches may be installed to provide this trigger circuit, or, use the exist switches (i.e. a light in the luggage compartment or a trunk ajar light in the dash), may be connected to BLUE wire directly. An indication of such a circuit is the wire having no voltage present when the hood or trunk is opened, and up to 12 volts when the hood or trunk is closed.

NOTE: When wiring more than one of vehicle's circuits to this wire, you may need a diode to isolate the circuits.



Optional Auxiliary Plug-In Dual Zone Sensor **4-pin white plug**

Plug the auxiliary dual stage sensor's connector into the alarm's 4-pin white plug; this port supplies 12 volts (RED wire), ground (BLACK wire), 1st stage trigger (GREEN wire), and 2nd stage trigger (BLUE wire).

Plug-In Red LED Status Indicator **2-pin red plug**

Mount the Red LED Status Light in a location where the driver can see it easily, and where it can be seen from outsides. Locate a suitable location, drill 1/4" hole, pull wires through and push LED, then connect plug-in LED to 2 pin red connector.

WHITE wire -20gauge **Single Bullet wire** **Tach Sense wire**

This TACH SENSE wire is a spare wire for few special cars, which cannot detect the engine start signal from power line (ignition sense), such as, it can't start the engine successfully. Connect White wire to charger (+) or starter solenoid (+) of vehicle.

BLACK loop wire **Start Mode Selector**

There are two modes for remote engine starting – **once mode** and **auto mode**, selected by this black loop wire. Refer to following chart:

No.	Black loop wire's situation	Start mode
1.	Cut	Once mode
2.	Not cut	Auto mode

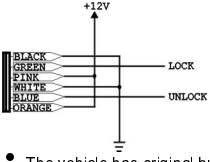
WHITE loop wire **Door Lock Active Time Selector**

This white loop wire can select the active time for central lock. See the following chart:

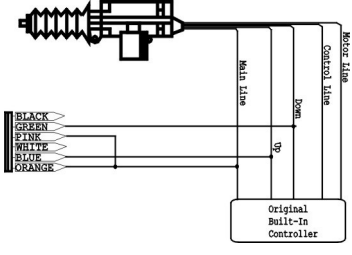
No.	White loop wire's situation	Door lock active time
1.	Cut	3.5 seconds
2.	Not cut	0.5 second

Power Door lock Interface **3-pin red plug**

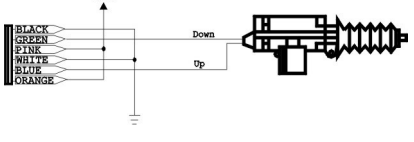
For vehicle having negative pulse door lock switches, connect the green wire to the vehicle's lock switch wire and the blue wire to the vehicle's unlock switch wire directly. Show the connection below:



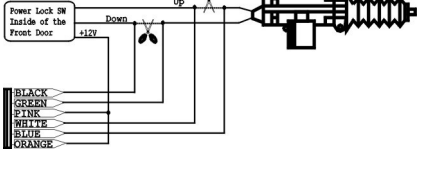
- The vehicle has original built-in Central Power Lock but without any switch.



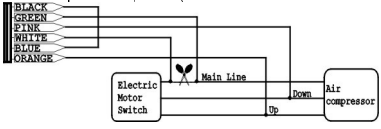
- The vehicle has built-in power lock and a switch existed inside of the front door. A 2-wire actuator and the control level were required.



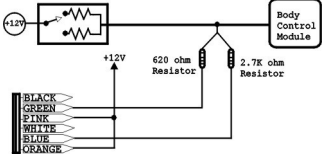
- The vehicle has power lock and electric power lock switch was installed. For example: Chrysler.



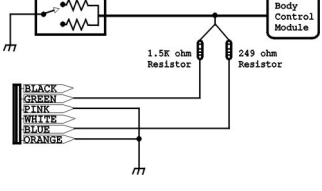
- The vehicle has built-in power lock and using compressor to control the switch. For example: Benz, Audi (Note: active time 5 seconds).



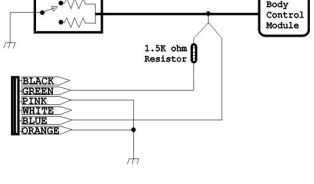
- The vehicle has built-in power lock that utilizes a single wire between the door lock switch and a control unit that is used by both lock and unlock the doors. The door lock relay is external and is wired as a positive pulse.



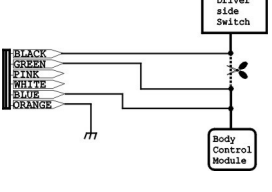
- The vehicle has built-in power lock that utilizes a single wire between the door lock switch and a control unit that is used by both lock and unlock the doors. The door lock switch grounds the single wire through the resistors.



- Single wire door locks – Mazda



- Single wire door locks - Nissan and Mazda MPV



User Manual

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